What can you do with Youth in the Garden?

Quick Lesson Plans Utilizing the Garden

Terrariums
During colder months students can build mini greenhouse for indoors. Using two clear plastic cups, sand, charcoal and potting soil. Talk with students about what they think a plant would need to grow in the winter. Students will only have to water these plants once because the water will cycle through the water cycle- explain. Sand and charcoal help with water filtration. Have students share where they will be keeping there plant safe-preferably where they can get as much light as possible. *GR K-6*

Dirt Challenge
To have students get over there sometimes fear of dirt, play in the mud! Make mud either in a bucket or contained area. Have students place there feet or hands in the mud. It can get a little messy but students get a kick out of dirt! Be sure to have a hose or cleaning bucket and towels for students to clean up. You can have students write a journal or poem around what it felt like. They can have their names, or pictures, placed on a "Dirt Challenge" poster board. *GR K-3*

Garden Journals
Have students make their own garden journals for the season. They can document their gardening experience through pictures poem and writing. Using cardstock or cardboard for outside covers, colored construction paper, hole punch and heavy duty string. The journal can be used to document a seed planted, adopted plant, or entire garden layout. Students can keep track of growth height, watering schedule, and harvest date. *ALL AGES*

Garden Scavenger Hunt
Compile a list of items students need to find in the garden, you can associate points to each item or simply have them check off if they find the item. Equip students with rulers, bags, magnifying glasses, bug catchers etc. Examples could be: Stem 8" long, weed root, smooth stone 3" wide, flower with six petals, etc. Have students circle up at the end of allotted time and share what they found, could not find, and why they think they could not find certain items. *GR 1-5*

Lady Bug Stones, Lady Bug Search
Discuss why lady bugs are good for the garden and how they help. Go on a lady bug search around the outlying areas of the garden, carefully catching any ladybugs and bringing them back to the garden. Older students can do a survey of the amount of ladybugs they find in a garden compared with outside the garden. Discuss outcomes. Smaller students can search for smooth stones at least four inches around and can paint these stones like a ladybug. They can be used to decorate the garden or paperweights. *GR K-4*

Labeling Signs
During colder months one can do some garden planning. Ask students what they would like to plant in their garden this spring. Suggest themes, salad garden, taco garden, pizza garden, or fairy garden. Make a list of veggies students would like to plant in the garden. Distribute cardstock and have students volunteer to make labeling sign to be placed in the garden. Students can use paint, colored pencils, crayon, and markers. Encourage students to make signs colorful and legible. They can be collected and laminated for future use! *ALL AGES*

Building a Trellis
Peas after Presidents Day, and beans when it gets a little warmer! Both can be trellised for maximum use of garden space and production. Older students can design a trellis, looking at different styles (metal, wood, bamboo, plastic, tepee or ladder). Discuss pro's and con's to each option and decide on best options. Offer pictures as examples *GR 6-HS*

Weed Tally
Ask students what they think a weed is. Discuss with students that a weed is a plant that is simply in the wrong place. Why don't we want weeds in the garden? Give each student a section of the garden and tell them to collect as many "weeds" and keep count. They then can log the number of weeds on a poster board with their name, date, and number of weeds they collected. *GR K-3*

Plant/Weed competition
After discussing what plants need to survive (sunlight, water, and soil). Have several 4" cards with each plant need. Divide the class into two groups "weeds" and "plants". Round one: plants are in even rows, where they can not move. Place plant needs on the ground, students have five seconds to pick up as many cards as possible, staying in one place. Record how many each student collects. Round two: plants are still in even rows but weeds are added (weeds do not have to be in rows they can go where ever they want) students are again given 5 seconds. Record the data and compare results. Similar game can be played (older students) with plant nutrients: Nitrogen, Potassium, and Phosphorus. *GR 1-5*

Bird Survey
Why are birds important for the garden? Why are they a nuisance to freshly planted gardens? Students will be conducting a bird survey of the garden and surrounding area. Partner up students with a clip board, pencils and paper. Students make a tally mark for every bird they see and a circle for every bird nest. Explain that birds may get frightened of noises so students should be quite, set boundaries for the survey, suggest students take different locations to make sure they don't count the same birds twice. *GR 1-5*

Bird Treats
Winter is a hard time for birds. Although most migrate to warmer places some stick around. Have students collect pinecones so make bird treats for those that stayed around. Students tie a long, durable string around the pinecone, using lard (or peanut butter if no student is allergic) cover the pinecone with a thin layer of this sticky substance, roll cones in birdseed and hang from tree. To transport sticky treats home, wrap in tin foil or recycled newspaper. *GR K-3*

Bugged Out
Discuss/Ask why we need bugs in our garden! Several educational books, ranging in age appropriateness, "The Icky Bug Alphabet Book" "Hide and Seek Science, Where's that Spider" Students can pick there favorite insect and draw a chalk picture of the insect and explain why they are important. Students can go on a bug search! Explain that bugs are living creatures and we must respect and return them to nature. *GR K-3*

Compost Worms
What is compost and why is it important to the garden. Borrow a working compost worm bin from Seattle Tilth and have students get up close with red wiggler rooms. Explain difference between red wigglers and night crawler worms. Have students measure and name worms, draw a picture and label the different parts of a worm (head, anus, segments, and clitellum) Guess how much a worm eats each day, and how much we would have to eat if we were worms? Students can have an apple snack and add the core to the worm bin! *ALL AGES*

What a Seed Needs to Grow Experiment
Using what a seed needs to grow as a variables- water, sunlight, air and soil, have three cups, with one of each of these variable taken away: one container that will not be watered, one that will be kept in the dark, one in a zip lock bag, and one where the seed is planted in a sponge. Wheat Grass seeds work well because of the fast germination times, within a week. Discuss the outcomes and why some seeds may have grown even if they didn't have all variables (desert plants, hydroponics, shade loving plants). *GR 3-6*

Map the distance food travels
Have three bags, with three pieces of produce in them. Each bag will contain a scenario on how that piece of produce arrived in the classroom, one bag will contain a vegetable from the local garden. Have students use string and push pins on a map to trace how far the food traveled. Discuss the problems with food traveling so far, why it is hard to eat local year round, solutions. Older students can calculate carbon footprints of food. Example of Scenario: Banana from Ecuador-collected on a farm, trucked to Quito, shipped to L.A. by boat, trucked to WA, driven home from grocery store. *GR 3-HS*

Where's that Veggie from?
Have students pick out their favorite vegetable or fruit. Then ask them where they originated from, what type of weather is ideal to grow them in, would they grow in WA? Discuss where students could find this information (Library, Internet, Gardeners). Have samples of produce (or pictures) from the garden and have students match where this produce originates from. *GR 4-HS*

Green Smoothies
Here is an awesome recipe to get kids to eat the last of that fresh spinach from your garden! They might be a little leery of the green color, but after they taste it, they will be screaming "add more spinach!"
1 banana
2 cups orange juice
2 cups freshly picked spinach
1 ½ cups frozen fruit (Strawberries, Mangos, or Pineapples)
Spinach is a great source of dietary fiber. It is known to be an excellent source of iron, calcium, and vitamins A and C. *ALL AGES.*

Garden Chores
Students should help with the maintenance of the garden through the year. This will create a sense of ownership in the garden. From watering with canisters, mulching, weeding, turning compost bins, planting seeds, transplanting starts, gathering sticks, to drawing the garden map, constructing stepping stones, and posting garden rules. Explain how to do each task, along with the importance. Ask to students to imagine what would happen if no one ever did a particular task. *ALL AGES*
.
Plant Part Cooking Stir-Fry/Potstickers/Garden Salad
Have students choose what they would like to prepare using the six different plant parts (leaf, stems, flowers, fruit, roots, seed). Discuss the function of each plant part. Students can divide into groups and make their own recipes. Example Plant Part Potstickers-

INGREDIENTS
1/2 head Napa Cabbage, cleaned and cored
1/2 cup carrots, peeled and diced
3 Tbs shallot, onion, or green onion, minced
1 Tbs garlic, minced
1 Tbs ginger, minced
1/2 small can water chestnuts, drained
10-20 wonton wrappers
2 Tbs water, reserved
1 Tbs vegetable oil

PREPARATION
1. Cut cabbage into 1'' pieces.
2. Add remaining prepped vegetables.
3. Smear water on the edges of the wrapper. Fold and seal.
4. Drizzle oil into hot pan. Fill pan with potstickers, ensuring enough cooking room.
5. Saute potsticker on each side.
6. Add water and cover pan to steam ingredients. Allow to steam 3 minutes.